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June 16, 2004
DONITA KONRAD
Name Donita Konrad
Signature



P&G Case 8878L

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In the application of :
Aleksy Mikhailovich Pinyayev et al. : Confirmation No. 6659
Serial No. 10/090,600 : U.S. Patent No. 6,740,281 B2
Filed March 4, 2002 : Issued May 25, 2004

For Apparatus For Producing Three-Dimensional Articles Of Indeterminate Axial Length

REQUEST FOR CERTIFICATE OF CORRECTION

UNDER 37 C.F.R. 1.322

Certificate of Correction Branch
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Certificate
JUN 24 2004
of Correction

Dear Sir:

It is requested that the attached Certificate of Correction be issued under 37 CFR 1.322 for the above-identified patent. The mistakes are apparently due to Patent Office printing errors.

Title

In the title of the invention, please insert -- APPARATUS FOR PRODUCING -- before "THREE-DIMENSIONAL ARTICLES OF INDETERMINATE AXIAL LENGTH". This amendment to the title was set out in the Amendment After 1st Office Action filed by Applicants on November 11, 2003 (a copy of which is attached hereto).

Column 3

Please delete the quotation marks around the paragraph beginning at line 38 and ending at line 54. The quotation marks were shown in the Amendments To The Specification section (p. 2) of the November 11, 2003 amendment attached hereto, however, they were meant to show the insertion of that amended paragraph, not to be a part of that paragraph.

Line 52, please delete "n" and insert therefor -- in --. The correct version appears on page 2 of the November 11, 2003 amendment attached hereto.

Column 4

Line 41, please delete "14" after "FIGS." and insert therefor -- 1-4 --. The correct version appears on page 6 of the specification (copy attached).

Column 6

Line 1, please insert a comma -- , -- after the word "closed." The correct version appears on page 7 of the specification (copy attached).

JUN 24 2004

Column 8

Line 6, please delete "an/unconstrained" and insert therefor -- an unconstrained --. The correct version appears on page 4 of the November 11, 2003 amendment attached hereto (the original Claim 10 is now Claim 1 in the issued patent).

Lines 18-19, please delete "said distal end being offset from proximal-end in the axial direction" and insert therefor -- said distal end being offset from said proximal end in the axial direction, -- as set out on page 2 of the Examiner's Amendment dated January 5, 2004 (copy attached).

Line 41, please insert -- a -- between "molding" and "multi-stage". The correct version appears on page 5 of the November 11, 2003 amendment attached hereto (the original Claim 16 is now Claim 5 in the issued patent).

Line 42, please delete "articles" and insert therefor -- article --. The correct version appears on page 5 of the November 11, 2003 amendment attached hereto (the original Claim 16 is now Claim 5 in the issued patent).

Line 43, please delete the semicolon, ";" after the word "comprising" and insert therefor - : --. The correct version appears on page 5 of the November 11, 2003 amendment attached hereto (the original Claim 16 is now Claim 5 in the issued patent).

Line 49, please delete the comma, "," between the words "extending" and "into." The correct version appears on page 5 of the November 11, 2003 amendment attached hereto (the original Claim 16 is now Claim 5 in the issued patent).

Line 58, please delete "of" and insert therefor -- or --. The correct version appears on page 5 of the November 11, 2003 amendment attached hereto (the original Claim 16 is now Claim 5 in the issued patent).

Lines 62-63, please delete "each mold segment away from said cavity in a separation" and insert therefor -- direction being parallel to said members of said respective --. The correct version appears on page 5 of the November 11, 2003 amendment attached hereto (the original Claim 16 is now Claim 5 in the issued patent).

Correction of these mistakes is believed necessary to avoid ambiguity with respect to the patentees' disclosure and claims.

Respectfully submitted,



Larry L. Huston
Attorney for Applicant(s)
Registration No. 32,994
(513) 634-9358

6/15, 2004
Customer No. 27752

Appl. No. 10/090,600
Atty. Docket No. 8878L
Amdt. dated 11/11/2003
Reply to Office Action of 10/23/2003
Customer No. 27752

Certification of Facsimile Transmission

I hereby certify that this correspondence is being facsimile transmitted to Examiner James Mackey at (703) 872-9306 to the Commissioner for Patents in the US Patent and Trademark Office on November 11, 2003

DONITA KONRAD

Name

Donita Konrad

Signature



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/090,600
Applicant(s) : Aleksey Mikhailovich Pinyayev et al.
Filed : March 4, 2002
Title : Moldable Three-Dimensional Articles Of Indeterminate Axial Length, Process Of Making, And Mold For Producing Such Articles
TC/A.U. : 1722
Examiner : James P. Mackey
Conf. No. : 6659
Docket No. : 8878L
Customer No. : 27752

AMENDMENT AFTER 1ST OFFICE ACTION UNDER 37 CFR §1.111(c)

Mail Stop Non-Fee Amendment

Commissioner for Patents

P. O. Box 1450

Alexandria, VA 22313-1450

Dear Sir:

INTRODUCTORY REMARKS

In response to the Office Action of October 23, 2003, please amend the above-identified application as follows, consider the following remarks and reconsider the application.

Amendments to the Specification begin on page 2 of this paper. In addition, the Abstract has been amended and provided on a separate sheet (see attachment following page __ of the paper).

Amendments to the Claims begin on page 3 of this paper.

Remarks begin on page 7 of this paper.

AMENDMENTS TO THE SPECIFICATION

Please amend the specification as follows:

Please replace the title on page 1 with the following amended title:

~~“Moldable Apparatus for Producing Three-Dimensional Articles Of Indeterminate Axial Length, Process Of Making, And Mold For Producing Such Articles”~~

Please replace the paragraph beginning on page 4, line 23, with the following amended paragraph:

“The static mixers 10 illustrated in Figs 1-6 are six-stage 12 static mixers 10, although a single-stage 12 static mixer 10 is also within the scope of the present invention. Further, it is to be recognized that single-stage 12 or multi-stage 12 static mixers 10 according to the present invention may be combined in sequence, to produce a static mixer 10 having any desired number of stages 12. While a round static mixer 10 is illustrated, the static mixer 10 according to the present invention may be of any desired cross-section. The static mixer 10 may be designed according to the teachings set forth in commonly assigned U.S. Application serial no. 09/911,774, filed July 24, 2001, in the names of Catalfamo et al., now U.S. Pat. No. 6,550,960 B2, issued Apr. 22, 2003. The stages 12 of the static mixer 10 may be of the same or different length in the axial direction AD, of equal or unequal diameter/cross-section, and have the same number of bars 16 or a different number of bars 16.”

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Withdrawn) An integral three-dimensional article having interstitials therein, said article comprising an axial direction and having lateral dimensions perpendicular thereto, said lateral dimensions of said article defining a periphery of said article, said article comprising alternately disposed elongate members and interstitials therebetween, said elongate members being arranged in two planes, a first plane of at least one elongate member and a second plane of at least one elongate member, each said plane of at least one elongate member intersecting at an included angle to define a stage, said article comprising a plurality of stages, each stage being axially joined to an adjacent stage.
2. (Withdrawn) An article according to claim 1, wherein each stage is rotationally offset from an adjacent stage.
3. (Withdrawn) An article according to claim 2 having interstitials therethrough.
4. (Withdrawn) An article according to claim 1, wherein each said plane comprises a plurality of elongate members.
5. (Withdrawn) An article according to claim 4, having two planes of elongate members disposed in member pairs, wherein a plurality of elongate members of one said member plane nests within a member pair of said other member plane.
6. (Withdrawn) An article according to Claim 5, having a plurality of axially nesting stages, wherein each stage has an axial face, said axial face being domed and having an angle equivalent to said included angle.
7. (Withdrawn) An article according to claim 6, wherein said elongate members lying within an elongate member plane form a closed figure, said elongate member plane further having at least two elongate members disposed within said closed figure and intersecting at an angle.
8. (Withdrawn) An article according to claim 7, wherein said elongate members are arranged in two sets, a first set of elongate members and a second set, each said elongate member of said first set and said second set having a first end and a second end opposed thereto, said at least one elongate member of said first set and said at least one elongate member of said second set intersecting at an included angle, said at least one elongate member of said first set spanning the entire lateral dimension of

said article, wherein each end of said at least one elongate member of said first set is juxtaposed with said periphery of said article, said first end of said at least one elongate member of said first set being free, and said second end of said at least one elongate member of said first set being juxtaposed with another said elongate member, said elongate members of said second set spanning a distance less than said entire lateral dimension of said article, wherein said at least one elongate member of said second set has at least one end juxtaposed with another said elongate member.

9. (Withdrawn) An article according to Claim 8, said article comprising three layers of substantially parallel elongate members in each stage, each said layer being offset from an adjacent layer in the axial direction, said layers comprising, in sequence in the axial direction, at least one elongate member which spans the entire lateral dimension of said article, a second layer comprising at least one elongate member spanning the entire lateral dimension of said article, and a third layer comprising at least one elongate member, said elongate member spanning a distance less than said entire lateral dimension.
10. (Withdrawn) A process for producing an integral multi-stage three-dimensional article having an axial direction and an unconstrained length in said axial direction and having interstitials therein, said process comprising the steps of providing at least two complementary mold segments, said mold segments being juxtaposable to circumscribe an enclosed cavity, said cavity having an axial direction and a lateral direction perpendicular thereto, each said mold segment comprising a wall and having a plurality of members extending from a proximal end juxtaposed with said wall into said cavity, said members defining an angle relative to said axial direction;
juxtaposing said mold segments to enclose a cavity therebetween, wherein each said member extending into said cavity has a distal end, said distal end contacting said wall of a diametrically opposed mold segment and/or another member ;
disposing a flowable, solidifiable material in said cavity;
allowing said material to solidify; and
separating each said mold segment from said solidified material, said separation occurring in a separation direction parallel to said protruding members of that mold segment.
11. (Withdrawn) The process according to claim 10, wherein said step of providing mold segments comprises the step of providing mold segments having a plurality of sets of

extending members, wherein each set of extending members produces a portion of a stage of said three-dimensional article.

12. (Withdrawn) The process according to claim 11, comprising the step of providing four complementary mold segments to circumscribe said cavity, each of said complementary mold segments subtending an angle of 90 degrees.
13. (Withdrawn) The process according to claim 11, comprising the step of sequentially removing said mold segments from said article.
14. (Withdrawn) An article made according to the process of claim 10.
15. (Withdrawn) An article made according to claim 14, wherein said article comprises a static mixer.
16. (Currently amended) An apparatus for molding a multi-stage integral three-dimensional article ~~[[s]]~~ having interstitials therein, said apparatus comprising:
at least two complementary mold segments, said mold segments being juxtaposable to enclose a cavity therebetween, said cavity having a longitudinal axis, said mold segments further comprising at least one member extending into said cavity at an angle relative to said axis;
and a transport for juxtaposing each said mold segment with the other in closed relationship to form said cavity, wherein said extending members extend in a direction from a proximal end juxtaposed with a wall of its said respective mold segment to a distal end, said distal end contacting either a wall of a diametrically opposed mold segment or another member when said mold segments are in the closed position, said transport further being capable of separating each mold segment away from said cavity in a separation direction, said separation direction being parallel to said members of said respective mold segment.
17. (Currently amended) ~~An apparatus according to claim 16, wherein said members extend from a proximal end to a distal end offset from said proximal end in the axial direction.~~ An apparatus for molding multi-stage integral three-dimensional articles having interstitials therein, said apparatus comprising:
at least two complementary mold segments, said mold segments being juxtaposable to enclose a cavity therebetween, said cavity having a longitudinal axis, said mold segments further comprising at least one member extending into said cavity at an angle relative to said axis;
and a transport for juxtaposing each said mold segment with the other in closed relationship to form said cavity, wherein said extending members extend in a

direction from a proximal end juxtaposed with a wall of its said respective mold segment to a distal end, offset from said proximal end in an axial direction, said distal end contacting either a wall of a diametrically opposed mold segment or another member when said mold segments are in the closed position, said transport further being capable of separating each mold segment away from said cavity in a separation direction, said separation direction being parallel to said members of said respective mold segment.

18. (Original) An apparatus according to claim 17, comprising four mold segments, each said mold segment subtending 90 degrees.
19. (Original) An apparatus according to claim 18, wherein each said mold segment has a set of extending members, each said set of extending members producing a portion of a stage of said article to be molded.
20. (Currently amended) An apparatus according to claim 19, wherein each [[each]] mold segment comprises at least three sets of extending members.

REMARKS

Restriction Requirement

Restriction is required between the following groups of claims:

I: Claims 1-9, 14 and 15 Article

II: Claims 10-13 Process of Producing an Article

III: Claims 16-20 Apparatus for Molding Articles¹

Applicants confirm the telephonic election, with traverse, of Claims 16-20. Traverse is based on the following.

The claims of Groups I-II are said to be distinct because the static mixer could be produced by gluing or welding separate elements together, or by dissolving a mold. Applicants respectfully note that Claim 1 recites “an integral three-dimensional article.” (emphasis added). An article made by gluing or welding separate elements together is not integral and falls outside the claims of Group I. Applicants respectfully note that MPEP 806.05(f) requires “that the product *as claimed* can be made by another and materially different process.” (emphasis in the original). In this case, the product as claimed cannot be made by a different process. The Office Action also proposes that the claimed three-dimensional article can be made by using a mold which is later dissolved. Applicants respectfully submit that a dissolvable material allowing elongate members to terminate in a distal end, and yet be dissolvable, is neither feasible nor known. Accordingly, Applicants respectfully request the Restriction Requirement of Groups I-II be reconsidered and withdrawn.

Groups II-III are said to be related as a process and apparatus for its practice. The inventions are said to be distinct because the apparatus may be used to practice a different process such as reshaping of foam or rubber. Applicants respectfully note that if the foam or rubber is cured, it will not be reshaped by compressing in a mold. Instead, it will simply be temporarily deformed. This does not constitute a different process, but instead just an alternative use of the claimed apparatus. Applicants respectfully note MPEP 806.05(e) squarely places the “burden ... on the examiner to provide reasonable examples that recite material differences.” In this case, Applicants respectfully submit the example is not reasonable. It is simply another use of the

¹ The Office Action states Restriction is required between three groups of claims reciting a “static mixer” article. Applicants respectfully note that the claims are drawn to three-dimensional articles generally, and not limited to the illustrated use of static mixers.

apparatus for a hypothetical purpose. Furthermore, the difference is not material – having the solid member conform to the shape of the apparatus (just as a flowable liquid material would do). The Examiner is respectfully requested to reconsider and withdraw the election requirement of Groups II and III.

The inventions of Groups I and III are related as apparatus and product made. The groups are said to be distinct because the product can be made by another and materially different apparatus such as dissolving the apparatus. Applicants again respectfully submit that an apparatus which is dissolved is neither known nor believed to be feasible. Accordingly, Applicants respectfully request the Restriction Requirement of Groups I and III be withdrawn.

The title has been updated to reflect the elected claims, subject to the traversal set forth above. The disclosure has been updated at page 4 and grammatical corrections made to Claims 16 and 20. Claim 17 is rewritten in independent form.

Claim 16 is rejected under 35 USC §103(a) over Garneau, Sr. (4,218,038, Figs. 9-11). The Office Action states that Garneau, Sr. discloses mold segments which enclose a cavity therebetween and having spacer walls 33, 34. However, Garneau, Sr. does not open the mold cavities in a separation direction parallel to the spacer walls 33, 34. Instead, Garneau, Sr. opens the mold cavity in a direction perpendicular thereto, as is known in the art. See Fig. 9 (2:24, mold halves in a closed position) and Fig. 11 (2:29, mold halves in the open position). Garneau, Sr. specifically teaches a way from opening the mold halves in a direction parallel to the spacer walls 33, 34 by stating that the mold half 27 is moved away “in a direction exactly perpendicular to the face surfaces and parting line” (3:51-52). The purpose of moving the mold half in this direction is to relieve pressure on the teeth of the comb “so that it is a simple matter to actuate the knock-out pins...” (3:58-59).

One of skill reading Garneau, Sr. would not be led to open the molds in the claimed direction parallel to spacer walls 33, 34. Instead, one would be led to open the mold halves in the direction Garneau, Sr. explicitly teaches in order to achieve the benefits Garneau specifically calls out. Opening the mold halves as taught by Garneau, Sr. would not allow for molding of three-dimensional interstitial articles as required by the instant claims. Accordingly, Applicants respectfully submit that Claim 16, as amended hereunder for formal purposes, is not taught or suggested by Garneau, Sr.


Applicants respectfully note with appreciation the allowance of Claims 17-20 upon being rewritten in independent form. Claim 17 is amended hereunder to be in independent form.

Appl. No. 10/090,600
Atty. Docket No. 8878L
Amdt. dated 11/11/2003
Reply to Office Action of 10/23/2003
Customer No. 27752

SUMMARY

The Examiner is respectfully requested to withdraw the Restriction Requirement, particularly the Restriction Requirement of Groups II-III. Applicants respectfully note that the claims of Group II require the limitation that molds be separated in a direction parallel to the members of the mold segment – which is the basis for patentability of the elected claims of Group III. Claim 16 and the claims which depend therefrom are neither taught nor suggested by the cited art. Claim 17 is believed to be allowable as rewritten.

Respectfully submitted,

By 

Larry L. Huston
Attorney for Applicant(s)
Registration No. 32,994
(513) 634-9358

November 11, 2003
Customer No. 27752

bars 16 from an adjacent stage 12. The embodiments of Figs 1-4 provide the benefit of less pressure drop than found in the embodiment of Figs. 7-9, and greater mixing than the embodiment of Figs. 5-6. Further, nested stages 12 provide more fluid mixing per unit length of static mixer 10 than non-nested configurations.

5 Referring to Figs 5-6, it is not necessary that adjacent stages 12 of the static mixer 10 be nested. Instead, the end of each stage 12 may contact the adjacent stage at only two points, as illustrated. This arrangement provides the benefit of simpler construction and lower pressure drop through the static mixer 10.

As illustrated by the Figures generally, each element 14 of forms a plane which is a
10 geometric variation of the cross section of the static mixer 10. For the round cross sections illustrated, the element 14 forms an ellipse or nearly so. For a square cross section the element 14 would form a rectangle, or nearly so, etc. It is only necessary that the static mixer be insertable in a flow channel of a desired geometry and that the bars 16 in the planes of a common stage be interlaced. By interlaced it is meant that a bar 16 of one element 14 be adjacent to a bar
15 16 of an element 14 of the other plane in that stage 14.

Perpendicular to the major axis of the bar 16 pairs and lying within the bar 16 plane is a see-through direction. The see-through direction traverses through the entire lateral dimension of the static mixer 10 without interruption or alternatively intercepts a bar 16 of another plane. That is to say that in the see-through direction, a small object may pass from one point on the
20 periphery of the static mixer 10 to a diametrically opposed point on the periphery of the static mixer 10 without intercepting a bar 16 or to another bar 16, and will be parallel to bars 16 located on all four sides of the interstitial having such a see-through direction. The see through direction provides access to that stage 12 of the static mixer 10 for the apparatus described below.

Referring to Figs. 7-9, four exemplary mold segments 20 are illustrated. However, just
25 two or more mold segments 20 may be circumferentially combined to produce a single stage 12 of the static mixer 10 according to the present invention. If two mold segments 20 are utilized, each mold segment 20 should subtend approximately 180 degrees. If three mold segments 20 are utilized for a particular stage 12, preferably each mold segment 20 subtends 120 degrees. If four mold segments 20 are utilized for a particular stage 12, preferably each mold segment 20
30 subtends 90 degrees, etc. However, it is to be recognized that mold segments 20 utilized for a particular stage 12 and which subtend unequal arcs may be suitable for the present invention, provided, however, that no mold segment 20 subtends more than 180 degrees.

The mold segments 20 each have alternating blades 26 and slots 24. The blades 26 form the interstitials, or flow channels, in the static mixer 10. Conversely, the slots 24 form the bars 16 of the static mixer 10. The blades 26 and slots 24 are preferably parallel, although the blade 26 may taper from its proximal end to its distal end and become smaller in cross-section as the distal end of the blade 26 is approached. While the figures illustrate blades 26 and slots 24 having a substantially rectangular cross-section, the invention is not so limited. Additionally, either the blades 26 or the slots 24 may have a substantially greater cross-section than the other. Furthermore, different sizes and cross-sections of blades 26 and slots 24 may be utilized within a given mold segment 20 and be disposed in a common stage 12 or in different stages 12. It is only necessary that each mold segment 20 mate with a complementary mold segment .

As illustrated, the mold segments 20 may come together in the radial direction to form and enclose a cavity. Each mold segment 20 comprises a wall. Extending outwardly from the wall of each mold segment 20 are the blades 26 arranged in groupings. The blades 26 on diametrically opposed and axially juxtaposed mold segments 20 will produce a bar 16 pair as noted above. Blades 26 which are offset 90 degrees therefrom will form a bar 16 plane in another stage 12 of the static mixer 10.

As many groupings of blades 26 as desired may be cascaded in the axial direction AD and attached to the walls of the mold segments 20. This flexibility allows a virtually unlimited number of stages 12 of the static mixer 10 to be injection molded at the same time. Furthermore, each stage 12 may be custom tailored to provide a different number, size, etc., of blades 26 and interstitials therebetween. Furthermore, there may be spaces between successive stages 12 wherein there are no blades 26 and flow straightening or the absence of mixing may occur. While a static mixer 10 having four mold segments 20 is illustrated, the invention is not so limited. Of course, the mold segments 20 will have an inlet port when the mold segments 20 are in the closed position. The inlet port may preferably be located on an axial face 22 of the mold segment 20, although, if desired, the port may be disposed on a circumferential surface of the mold segment 20. Additionally, one or more vents may be incorporated into the mold segments 20 as well and as would be known to one of ordinary skill.

When the mold segments 20 are closed, a flowable, solidifiable material is injected into the cavity created by the mold segments 20. The material may be a gas, liquid, or may be granular as occurs with powder metallurgy. Solidification may occur due to release of thermal energy, such as freezing, reactive phase changes, such as curing and/or compaction such as occurs with granular or powder materials. Suitable materials for use in making the articles



1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Larry Huston on 05 January 2004.

The application has been amended as follows:

Claims 1-9 and 14-16 have been cancelled.

In claim 10, line 11, --said distal end being offset from said proximal end in the axial direction,-- has been added after "has a distal end,".

In claim 11, line 3, "each s t of xtending members" has been changed to --each set of extending members-- for clarity.

2. The following is an examiner's statement of reasons for allowance: The prior art of record does not teach or fairly suggest a molding apparatus as claimed in claim 17, including extending members which extend from a proximal end to a distal end offset from the proximal end in the axial direction of the cavity, the distal end contacting either the wall of a diametrically opposed mold segment or another member, and including a transport for separating each mold segment in a separating direction parallel to the extending members of the respective mold segment. Also, in view of the above amendment to claim 10, process claims 10-13 have been rejoined with allowable apparatus claims 17-20, since the prior art of record does not teach or fairly suggest a process for molding using such a molding apparatus, as claimed in claim 10.

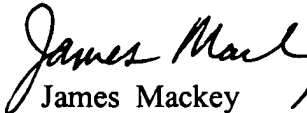
Art Unit: 1722

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James Mackey whose telephone number is 571-272-1135. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on 571-272-1151. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-0987.


James Mackey
Primary Examiner
Art Unit 1722

1/5/04

jpm
January 5, 2004

**UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION**

PATENT NO. : 6,740,281 B2

DATED : May 25, 2004

INVENTOR(S) : Aleksey Mikhailovich Pinyayev et al.

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Title

In the title of the invention, insert -- APPARATUS FOR PRODUCING -- before "THREE-DIMENSIONAL ARTICLES OF INDETERMINATE AXIAL LENGTH".

Column 3

Delete the quotation marks around the paragraph beginning at line 38 and ending at line 54. Line 52, delete "n" and insert therefor -- in --.

Column 4

Line 41, delete "14" after "FIGS." and insert therefor -- 1-4 --.

Column 6

Line 1, insert -- , -- after the word "closed."

Column 8

Line 6, delete "an/unconstrained" and insert therefor -- an unconstrained --.

Lines 18-19, delete "said distal end being offset from proximal-end in the axial direction" and insert therefor -- said distal end being offset from said proximal end in the axial direction, --.

Line 41, insert -- a -- between "molding" and "multi-stage".

Line 42, delete "articles" and insert therefor -- article --.

Line 43, delete "," after the word "comprising" and insert therefor -- ; --.

Line 49, delete "," between the words "extending" and "into."

Line 58, delete "of" and insert therefor -- or --.

Lines 62-63, delete "each mold segment away from said cavity in a separation" and insert therefor - direction being parallel to said members of said respective --.

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PATENT NO. 6,740,281 B2

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FORM PTO 1050 (REV. 3-82)
P&G Case: 8878L

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